

**AFFIDAVIT OF ADMIRAL BEN J. LEHMAN, U.S. NAVY, RETIRED  
IN SUPPORT OF FOSTER WHEELER'S NOTICE OF REMOVAL**

I, Ben J. Lehman, understanding and being under the penalty of perjury, declare:

1. I am a Rear Admiral, Retired, of the United States Navy [U.S. Navy]. I received notice of my commission as an Ensign in April, 1942 and commenced active duty in the U.S. Navy on June 1, 1942. Immediately prior to commencing active duty in the U.S. Navy, I attended the College of the City of New York. I had been a "student engineer" at the Mack Manufacturing Co. [Mack Trucks] in Allentown, PA and had been enrolled as a special student at Lehigh University, Bethlehem, PA from June 1941 until January 1942. I returned to the College of the City of New York in order to complete my course work there and then enter military service. I had already completed two years of U.S. Army ROTC. On entering active duty, the U.S. Navy ordered me to study naval architecture and marine Engineering at the Massachusetts Institute of Technology [MIT]. Later, I was ordered to the U.S. Naval Academy Post-Graduate School at Annapolis [now the U.S. Navy Post-Graduate School in Monterey, CA]. I received a Master of Science [SM] from Harvard University in 1949. I studied Design Philosophy and Advanced Stress Analysis at Stanford University in 1957 and 1958. In the U.S. Navy, I served as a Ship Superintendent and Dry Docking Officer at the New York Naval Shipyard [formerly the Brooklyn Navy Yard], between 1942 and 1944, as a Ship Superintendent at the San Francisco Naval Shipyard from September 1950 to May 1952, and as a Planning Officer at the Assistant Industrial Manager, San Francisco from 1952 to 1954. In the Navy, I have always been an Engineering Duty Officer. I was promoted to Rear Admiral in 1977 in the Naval Reserve. I was employed as an engineer by the General Electric Co. between 1946 and 1958, and by the Bethlehem Steel Co.'s Shipbuilding Division in 1949 and 1950. I held the positions of Director of Engineering at a major shipbuilding company in Seattle, WA from 1969 to 1972 and of Vice President of Engineering in

Pascagoula, MS from 1972 to 1975. During all these periods I have maintained close contact with the U.S. Navy. During times of civilian employment, I have had periods of active duty in the Department of Defense [DOD], the Naval Sea Systems Command [NAVSEA] in Washington, D.C., and shipyards. My experience has caused me to be thoroughly familiar with U.S. Navy specifications by means of which the U.S. Navy controlled its contracts and inspection procedures, and thereby controlled its suppliers. Since my retirement in 1982 my specific knowledge of new procedures has decreased. I have been an independent consultant since 1975. I have personal knowledge of the facts herein.

2. I submit this Affidavit in support of Foster Wheeler's Notice of Removal to attest to the levels of direction, control, and supervision exercised by the U.S. Navy over the design and manufacture of equipment, including boilers and their auxiliary equipment [collectively referred to as "boilers"] designed and constructed for installation on ships of the U.S. Navy.

3. During my service in the U.S. Navy as a Ship Superintendent, I was personally involved with supervision and oversight of ship's overhauls and alterations. I was fully aware that only boilers especially designed and built for the propulsion of U.S. Navy combat vessels, including Foster Wheeler boilers, could be installed. These were designed and manufactured in accordance with detailed specifications written, approved, and issued by the U.S. Navy, specifically NAVSEA or its predecessors, including the Bureau of Engineering.

4. The U.S. Navy chain of command concerning ship construction comprised several layers. The Secretary of the Navy [subject to the President and Congress] had the ultimate authority related to contractual and technical control. An Under Secretary was directly concerned with ship acquisitions. The Under Secretary position has now been eliminated, and that authority now rests with the Chief of Naval Operations who provides NAVSEA with the

desired ship characteristics, and oversees its performance. In the 1930s, Foster Wheeler, as a boiler and heat exchanger manufacturer, was under the cognizance of the Bureau of Engineering. The representative of that Bureau at the plant was an Inspector of Naval Machinery. The Bureau of Engineering and the Bureau of Construction and Repair were combined in 1940 to create the Bureau of Ships: for a time Approvals were required from both the Inspector of Machinery and the Supervisor of Shipbuilding for the lead ships of a class. Later, the Inspectors of Naval Machinery were renamed Inspectors of Naval Material. About 1958, the Bureau of Ordnance was merged with the Bureau of Ships to form NAVSEA. As a reduction in the pace of shipbuilding continued, routine inspection responsibilities were assumed by a new organization: the Defense Contract Administration Services Agency [DCASA]. This organization had many responsibilities, but lesser technical qualifications. Technical questions were referred to the Bureaus [Commands] in Washington. Throughout all of these reorganizations there were no changes in the ultimate authorities or the responsibilities of those authorities. Suppliers of equipment and the builders of ships have had the U.S. Navy's acceptance of their products determined by representatives of different organizations at different times but NAVSEA or its predecessors always had the ultimate authority and the professional competence to accept or reject them.

5. Under NAVSEA, as under its predecessors, the U.S. Navy's shipbuilding and acquisition of equipment for the ships comprised several levels of authority. Detailed technical control over ship design, construction, repair, and inspection was in NAVSEA. The Commander of Naval Supply Systems Command [NAVSUP] had contractual control of some procurements. Each of these two organizations had oversight responsibilities regarding, among other things, boilers manufactured for U.S. Navy vessels. Compliance with the specifications and standards was directly monitored by Inspectors of Naval Machinery under both these divisions: those

under NAVSUP generally worked on site at the supplier's [in this case Foster Wheeler's] manufacturing facilities and Machinery Superintendents or Inspectors of Naval Machinery carried out their responsibilities at the shipbuilding yards. Moreover, it was common in my experience for technical personnel from the Propulsion Equipment Groups of NAVSEA to inspect the manufacturing and quality assurance processes at supplier's plants and the boiler erection and inspection procedures at the shipyards. In my experience, it was machinery inspectors who exercised primary, front line control over the work performed for the Navy by suppliers such as Foster Wheeler in the production of boilers and other equipment. The Inspectors of Naval Machinery [or those with other titles who succeeded them] were responsible for assuring that contractors such as Foster Wheeler complied with the contract specifications every detail. Further, the Inspectors of Naval Machinery would report to their superiors any violations of, or failures to comply with specifications, refuse to apply their stamp of approval, and not authorize shipment. This was true whether the installation was to be done by government shipyards or government contract shipyards.

5. The U.S. Navy retained the "final say" over the design of any piece of equipment, and made the ultimate decisions, whether engineering or contractual.

6. Further, I can attest that the military specifications for boilers and other equipment intended for use on vessels of the U.S. Navy, known as "MilSpecs", were drafted, approved, and maintained by the U.S. Navy, specifically NAVSEA or its predecessors, to encompass all aspects of shipboard equipment, including the material requirements.

7. These contract specifications reflected the state of the art and the special needs of vessels destined for combat. NAVSEA maintained and controlled the MilSpecs because it had direct contact with the forces afloat and the shipyards, and therefore superior knowledge of the

demands and requirements of vessels ready for combat, and the availability of processes and materials.

8. The U.S. Navy's unique specifications for boilers were communicated to boiler suppliers such as Foster Wheeler when the U.S. Navy, either directly or through its contractors, issued a negotiated contract or a Request for Proposal for equipment. The U.S. Navy specifications included the nature of any communication affixed to boilers or other equipment supplied to the U.S. Navy.

9. The U.S. Navy had complete control. It could not, and did not, permit its contractors to implement any changes. Every aspect of every item needed to be controlled because:

- a. it had to be consistent with the ability of the crew to operate the ship, especially on its combat missions;
- b. it had to be compatible with the ability of the crew to maintain the ship and perform emergency repairs during its service using materials and parts carried on board when shipyard assistance was not available;
- c. every item had to be functionally compatible, fit in the space available, and be maintainable and operable with materials available from the U.S. Navy's supply system.

10. The U.S. Navy had complete control over every aspect of every piece of equipment. Military specifications governed every significant characteristic of the equipment used on U.S. Navy ships, including the instructions and warnings. Drawings for nameplates, the texts of instruction manuals, and every other document relating to construction, maintenance, and operation of the vessel was approved by the U.S. Navy. This control included the decision of which warnings should or should not be included. Thereby, the U.S. Navy controlled the decisions with regard to instructions and warnings on every piece of equipment. The U.S. Navy would not, and could not, permit any equipment manufacturer or supplier to interfere with the Navy's mission by placing warnings on any equipment [or in any instructions or manuals which accompanied the

equipment] on any U.S. Navy ships or in any shipyards in which U.S. Navy ships were built or repaired that might cause Sailors or workers to deviate from their mission or require the U.S. Navy to devote scarce resources to programs it deemed not essential, in its unilateral view.

11. In addition to specifications for the design and manufacture of the equipment itself, the U.S. Navy also had detailed specifications that governed the form and content of the written materials to be delivered with the equipment, including boilers, supplied to the U.S. Navy. The U.S. Navy was intimately involved with and had final approval of all technical and engineering drawings, operating manuals, safety or hazard information and any other written information that accompanied or related to any piece of equipment. The U.S. Navy determined the nature of hazards to be subject to any precautionary labeling and the content of such labeling. In short, the U.S. Navy dictated every aspect of the design, manufacture, installation, overhaul, written documentation and warnings associated with its ships and did not permit deviation from any of its contractors.

12. The U.S. Navy would never permit a supplier to suggest, advise, or require any actions that would be disruptive to the normal operation of the ship in its primary function of defending our Country. Procedures for operation were taught and enforced by officers of all ranks, from Petty Officers to Captains. Any written material regarding procedures for working around boilers that differed would have interfered with the normal and necessary operations of U.S. Navy ships. Indeed, in its specifications for manuals the U.S. Navy specifically limited warning information to items and events dealing with the operation of equipment. By definition, the application or removal of insulation would not have been included.

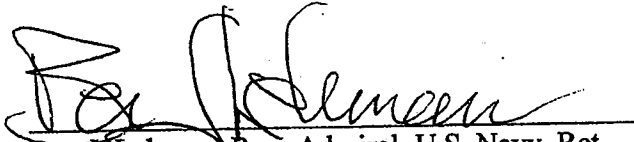
13. Asbestos was rampant throughout U.S. Navy ships. Sailors and civilian personnel were exposed at all times when they were aboard ships regardless of where they were stationed or where they worked. In order to protect all these individuals from exposure to asbestos, the U.S.

Navy would have had to allocate scarce resources to provide respiratory protection for all sailors and workers every hour of every day that they were on board. Implementing wet down procedures and creating containment areas would also have been required to implement effective industrial hygiene programs. The U.S. Navy made a conscious decision on allocation of its resources in light of its knowledge of the hazards of asbestos and its mission to protect our Country. The U.S. Navy conducted extensive research concerning the hazard of exposure to asbestos starting in the 1930's. In the early 1940's, the Navy's Bureau of Medicine and Surgery, in coordination with the U.S. Maritime Commission, set standards based on the report of Dr. Drinker and Fleischer and Marr. Through its participation in government programs and conferences into the 1980's, the Navy stayed abreast of the latest information, including the results of research. The U.S. Navy made a conscious and informed decision about how asbestos would be used on its ships and how exposures would be controlled, if at all, on its ships.

14. The U.S. Navy would not have allowed its equipment suppliers, such as Foster Wheeler, to affix any warning related to any asbestos hazards on their equipment. This would have included boilers. Further, the U.S. Navy would not have allowed Foster Wheeler to place any warnings related to asbestos hazards in any written material provided by Foster Wheeler to the U.S. Navy or to a U.S. Navy contractor in accordance with its contracts, including its technical and operations manuals. To do so would have interfered with the U.S. Navy's mission and control of its ships and personnel.



I declare under penalty of perjury that the foregoing is true and correct, and that if called as a witness, I could competently testify to the foregoing facts, all of which are within my own personal knowledge.

  
Ben J. Lehman, Rear Admiral, U.S. Navy, Ret.

Before me, the undersigned officer, personally appeared Ben J. Lehman, Rear Admiral, U.S. Navy, Ret. known to me to be the person whose name is subscribed to the within instrument, and acknowledged that he executed the same for the purposes therein contained.

In witness whereof, I hereunto set my hand and official seal acknowledge.

Executed this 12<sup>th</sup> day of July 2007.

On this 12 day of 07, 2007, before me, a Notary Public,

Josh Martin 

MY COMMISSION EXPIRES August 28, 2010

